

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

MIKULECKY, Klaus
Clariant Produkte (Deutschland) GmbH
Group Intellectual Property
Am Unisys-Park 1
65843 Sulzbach
ALLEMAGNE

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing
(day/month/year)

13.06.2006

Applicant's or agent's file reference
2004DE411

IMPORTANT NOTIFICATION

International application No.
PCT/EP2005/003004

International filing date (day/month/year)
22.03.2005

Priority date (day/month/year)
29.03.2004

Applicant
CLARIANT PRODUKTE (DEUTSCHLAND) gmbh

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Longo, E

Tel. +49 89 2399-8141




PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2004DE411	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/EP2005/003004	International filing date (<i>day/month/year</i>) 22.03.2005	Priority date (<i>day/month/year</i>) 29.03.2004	
International Patent Classification (IPC) or national classification and IPC INV. C11D3/00 C11D1/62 C11D3/43 C11D3/30			
Applicant CLARIANT PRODUKTE (DEUTSCHLAND) gmbh			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of 3 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 24.01.2006		Date of completion of this report 13.06.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Hillebrecht, D Telephone No. +49 89 2399-8168	



INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITYInternational application No.
PCT/EP2005/003004**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-10 as originally filed

Claims, Numbers

1 received on 24.01.2006 with letter of 23.01.2006

2-10 received on 05.04.2006 with letter of 20.03.2006

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2005/003004

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	1-10
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/EP2005/003004

The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: EP-A-0 240 727 (HENKEL KGAA) 14 October 1987
- D2: WO 01/85892 A (PROCTER & GAMBLE) 15 November 2001
- D3: JP 10 251972 A (LION CORP) 22 September 1998
- D4: WO 98/08924 A (PROCTER & GAMBLE) 5 March 1998
- D5: WO 99/60082 A (UNILEVER PLC) 25 November 1999

V.

1. Claim 1 is novel and inventive (Article 33(1) to (3) PCT).

Claim 1 defines a concentrated ester quat composition comprising

- a) at least 50 wt% of an ester quat according to formula (I),
- b) an organic solvent,
- c) water, and
- d) triethanolamine, monoethanolamine, ethylenediamine, dialkylamines, dialkyl methyl amines, ethoxylated alkyl amines or methyl propanol alkyl amine.

D1, claim 5, shows a respective composition comprising 30 to 70 wt% of an ester quat, the range of from 50 to 70 wt% is overlapping with present claim 1, glycerol and further organic solvents, water and an acid such that the pH is below 6. There is no indication in D1 to add any compound selected from item d) of present claim 1.

D2, example 3 on page 68 shows a composition comprising 68.47 wt% of an ester quat, TMPD as a solvent, and 5.67 wt% of water. Again, none of the required amines can be found in combination with items a), b), and c) of present claim 1.

D3, paragraphs [0017] to [0022] discloses highly concentrated esterquat

compositions comprising more than 73 wt% of the esterquat, water, ethanol, and non-specified amines/amine salts. Furthermore, alkali salts are present. The present amines are not disclosed.

2. The problem to be solved resides in providing an highly concentrated ester quat composition being stable against hydrolysis of the ester bond and which can easily be diluted. The problem has apparently solved by adding one of the specified amines. D3, shows that for basic salts like Na citrate, the hydrolytic stability is reduced compared to neutral salts. However, there is no teaching in the prior art that amines may be used as stabilizers preventing the hydrolysis of the ester bond of ester quats. In D5 some amines are used to stabilize esterquats in view of the dequaternization of the ester quats. There is no indication that hydrolysis of the ester bonds may also be affected.

VIII.

1. Regarding example 8 of the specification, it is not readily apparent which compositions are used therein. Thus, it is not possible to identify which features of the presently claimed composition are responsible for the increase in viscosity. Applicants did not comment on this observation.
2. Although it is obvious that example 4 on page 7 of the specification is erroneous, there is apparently no way to remedy this error.